

AMENDMENT

U.S. Patent Application No. 09/886,119

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Upon entry of this Amendment, claims 1-17 are pending in the application. Of these claims, claims 1, 7, 8, 16 and 17 are independent. In response to the Office Action (Paper No. 8), Applicant respectfully submits that the pending claims define patentable subject matter.

I. Preliminary Matters

The specification is objected to as failing to provide an antecedent basis for the subject matter of claim 1. By this Amendment, Applicant has amended the specification to add a description of the end portions of the grooves as proposed by the Examiner. As noted by the Examiner in the Office Action, this amendment to the specification is fully supported by the application as filed and is not considered to be new matter. Accordingly, the Examiner is requested to remove the objection to the specification.

II. Rejection under 35 U.S.C. § 112, second paragraph

Claims 1-6, 9, 10, 12, 13 and 16 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. With regard to claims 1 and 16, the Examiner asserts the scope and meaning of the phrase “end portions of the sub-groove are formed so that the groove bottom is not inclined from the groove opening” is unclear. The Examiner suggests amending claims 1 and 16 to recite “a groove bottom of each end portion extends substantially vertically from the outer surface of the block”. By this Amendment, Applicant has amending claims 1 and 16 to recite “end portions of the sub-groove are formed so that the groove bottom extends substantially vertically to the outer surface side of the block”.

AMENDMENT

U.S. Patent Application No. 09/886,119

With regard to claims 3, 4, 9, 10, 12 and 13, the Examiner maintains that the claims are indefinite because the claims “describe an intended use of the tire instead of an additional limitation of the tire” (i.e., the mounting direction of the tire and the rotating direction of the tire). Further, the Examiner objects to claims 3, 4, 9, 10, 12 and 13 as being in improper dependent form because the Examiner asserts the claims describe an intended use instead of further limiting the subject matter of a previous claim.

By this Amendment, Applicant has amended claims 3 and 4 to structurally define the inclination of the central main portion of the sub-groove, and claims 9, 10, 12 and 13 to structurally define the offset of the central main portion of the sub-groove, without regard to the mounting position or rotation direction of the tire. In particular, claim 3 has been amended to recite “the central main portion of the sub-groove is inclined from the groove opening on the surface side of the block toward the groove bottom in a direction extending towards an equatorial plane of the tire” (see Fig. 1), and claim 4 has been amended to recite “the central main portion of the sub-groove is inclined from the groove opening on the surface side of the block toward the groove bottom in a direction extending away from an equatorial plane of the tire” (see Fig. 5). Claim 9 has been amended to recite “the central main portion is arranged so as to offset from the diagonal in a direction away from an equatorial plane of the tire” (see Fig. 12), and claim 10 has been amended to recite “the central main portion of the sub-groove is arranged so as to offset from the diagonal in a direction toward an equatorial plane of the tire” (see Fig. 10). Claim 12 has been amended to recite “the sub-groove is arranged at a position offset from the diagonal toward a side of the tire which is nearest to the block in a widthwise direction” (see Fig. 12), and

AMENDMENT

U.S. Patent Application No. 09/886,119

claim 13 has been amended to recite “the sub-groove is arranged at a position offset from the diagonal toward a side of the tire which is farthest from the block in a widthwise direction” (see Fig. 10).

In view of the amendments to claims 1, 3, 4, 9, 10, 12, 13 and 16, the Examiner is requested to remove the § 112, second paragraph, rejection.

III. Prior Art Rejections

Claims 1, 3, 4, 6 and 16 are newly rejected under 35 U.S.C. § 103(a) as being unpatentable over Herbelleau et al. (USP 4,298,046; hereafter “Herbelleau”) in view of Fukuoka (USP 5,950,700) and JP 11-151914 (hereafter “JP ‘914”). Claims 2, 5 and 7 are newly rejected under 35 U.S.C. § 103(a) as being unpatentable over Herbelleau in view of Fukuoka, JP ‘914 and EP 485883 (hereafter “EP ‘883”). Claims 8-14 are newly rejected under 35 U.S.C. § 102(b) as being anticipated by EP 485884 (hereafter “EP ‘884”). Claims 8-14 remain rejected under as being unpatentable over Landers ‘169 (USP 5,824,169). Claims 7 and 15 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Landers ‘169 in view of EP 810104 (hereafter “EP ‘103”) and/or Lurois (USP 5,896,905). Claim 17 remains rejected under 35 U.S.C. § 103(a) as being unpatentable over Landers ‘169 in view of EP 573890 (hereafter “EP ‘890”) and Landers ‘766 (USP 5,176,766).

By this Amendment, Applicant has amended independent claims 1 and 16 recite the central main portion of the sub-groove is inclined with respect to the equatorial plane in a direction opposite of the direction of inclination of each of the end portions, wherein each end

AMENDMENT

U.S. Patent Application No. 09/886,119

portion connects the central portion to a circumferential groove, as suggested by the Examiner.¹

Accordingly, Applicant respectfully submits that independent claims 1 and 16, as well as dependent claims 2-6, should now be in condition for allowance.

By this Amendment, Applicant has amended independent claims 7, 8 and 17 to recite that each of the blocks has “only one sub-groove”.² Applicant respectfully submits that the combined references do not teach or suggest this feature of the claimed invention. In particular, Landers ‘169, Landers ‘766, Herbelleau, Fukuoka, JP ‘914, EP ‘104, EP ‘883 and EP ‘884 disclose that each block has a plurality of sub-grooves.

Landers ‘169, for example, discloses a block having a sipe 17 crossing the block and two sipes 17a formed in the shoulder of block (see Figure 3). Further, the central portion of the sipe 17 is not arranged at a position offset from the diagonal of the block. Unlike the present invention, Landers ‘169 also requires to tie bars 38 to stabilize the lug and a notches 44 which substantially parallel the sipe 17.

Further, EP ‘104, EP ‘883 and EP ‘884 do not teach or suggest that a central main portion of a sub-groove (sipe) formed in each block extends in a substantially same direction as a diagonal of the block, as required by claim 7, or is arranged substantially in parallel to a diagonal of the block, as required by claims 8 and 17.

¹ The Examiner indicates that independent claims 1 and 16 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112, second paragraph, and recite the orientation of the central portion and end portions shown in Figures 1 and 5.

² See, for example, Figures 10 and 12 of the present application.

AMENDMENT

U.S. Patent Application No. 09/886,119

Accordingly, Applicant respectfully submits that independent claims 7, 8 and 17, as well as dependent claims 9-15, should be allowable because the combined references do not teach or suggest all of the features of the claims.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Christopher R. Lipp
Registration No. 41,157

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: April 22, 2004

Attorney Docket No.: Q62668